

Bioscience Enterprise

Postgraduate Handbook 2018



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND



Institute for Innovation
in Biotechnology

Welcome to Bioscience Enterprise

The School of Biological Sciences is a vibrant and exciting environment to work, offering a wide range of multi-disciplinary research opportunities in plant, marine and animal biology, bioinformatics, biotechnology and biomedical science. Our staff are recipients of both national and international research funding and awards, and feature regularly in scientific communications and social media.



The Bioscience Enterprise programme is where the worlds of business and science come together. The programme interfaces closely with industry to provide real-time business training for science graduates. It is jointly taught with the Business School and offers plenty of networking opportunities to meet practitioners from industry who contribute through lectures in taught courses, internships for masters students and, of course, our forum sessions held regularly throughout the year.



If you are interested in the business side of science then this programme offers the opportunity to learn the finance, marketing and legal aspects of science that will prepare you for a wide range of job opportunities in science and business enterprises.

We look forward to welcoming you to the next exciting stage of your career.

ASSOCIATE PROFESSOR KERRY LOOMES
Director, Bioscience Enterprise Programme

PROFESSOR EILEEN MCLAUGHLIN
Head of School

Postgraduate study options in Bioscience Enterprise

Life Sciences

PGDipBioEnt

MBioEnt

Why study Bioscience Enterprise?

The Postgraduate Diploma in Bioscience Enterprise and Master of Bioscience Enterprise represent inter-disciplinary programmes which aim to give science graduates the skills to move with confidence in both the science and business industries. You'll gain skills in the financial, marketing and legal aspects of science which will prepare you for a wide range of job opportunities in science and business enterprises. The programmes also offer plenty of networking opportunities for students to meet practitioners and leaders from industry and business. Scientists graduating from these programmes will be business-savvy and comfortable in a business environment, and may give a company a competitive edge or be the key to a successful start-up.

Prerequisites

Candidates for entry into the PGDipBioEnt must have a bachelors degree related to the life sciences, for example, BSc with a major or specialisation in Biological Sciences, Bioinformatics, Biomedical Science, Food Science, Medicinal Chemistry, Pharmacology, or Psychology; or a BE in Biomedical Engineering; or a BPharm; or a BTech in Biotechnology.

Enrolment can be full-time (Semester One start only) or part-time. The latter will appeal to employees who wish to upskill and extend their knowledge base. Most SCIENT classes are held on weekday evenings, 4-7pm.

Entry into the masters programme requires completion of the PGDipBioEnt with a GPA of 6.0 in at least 90 points. The masters programme consists of two compulsory courses and a six-month internship in a company or Government organisation during which candidates research a science-business project and write a thesis.

Postgraduate courses

Code	Title	Semester
SCIENT 701	Accounting and Finance for Scientists	S1
SCIENT 702	Marketing for Scientific and Technical Personnel	S1
SCIENT 703	Frontiers in Biotechnology	S2
SCIENT 704	Law and Intellectual Property	S1
SCIENT 705	Research Commercialisation	S2
SCIENT 706	Commercialisation Project	S2
SCIENT 707	Special Topic	*
SCIENT 720	Science Enterprise Research Methods	S1
SCIENT 721	Product Development and Regulatory Environments	S1
SCIENT 722	Current Issues in Bioscience Enterprise	*
SCIENT 794A, SCIENT 794B	Thesis	S1, S2



Photo: Supreme Biotechnologies

Postgraduate Diploma in Bioscience Enterprise (PGDipBioEnt)

Prerequisite

BSc or BSc(Hons) with a major in Biological Sciences, Bioinformatics, Biomedical Science, Food Science, Medicinal Chemistry, Pharmacology or Physiology, or a BE in Biomedical Engineering; or a BPharm; or a BTech in Biotechnology. You will require a GPA of 6.0.

Programme structure

- 90 points: SCIENT 701-706 (the topics include accounting, finance, marketing, law, intellectual property and commercialisation, as they relate to scientists)
- 30 points from approved 700-level courses in Biological Sciences, Bioinformatics, Medical Science, Food Science or Bioscience Enterprise listed in the Postgraduate Diploma in Science schedule, or courses from other approved programmes

Length: Two semesters of full-time study; part-time study may be completed over a maximum of four years

Master of Bioscience Enterprise (MBioEnt)

MBioEnt consists of two compulsory courses (SCIENT 720, 721) and a six-month internship with an external organisation during which students research a project and write a thesis (SCIENT 794). Students can enrol in full-time study (Semester One start only) or part-time.

Prerequisite:

Students who successfully complete the PGDipBioEnt with a GPA of 6.0 over the best six courses are eligible for the MBioEnt in year two.

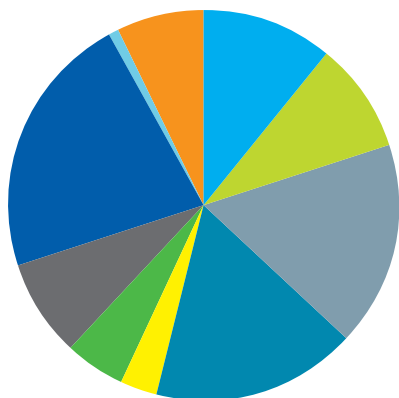
Structure:

- 90 points: SCIENT 794 Thesis, completed as a business research project and submitted during a six-month industry internship
- 30 points: SCIENT 720, 721

For course descriptions and more information:
www.science.auckland.ac.nz/bioscience-enterprise or www.biotech.co.nz

Employment outcomes

This graph gives an overview of the employment of MBioEnt graduates. An updated survey in June 2015 covered 122 graduates for the period 2007-2013.



●	11%	Food/Agriculture
●	9%	Pharma
●	17%	Medtech
●	17%	Biotech
●	3%	Government
●	5%	Academic research
●	8%	Finance/Legal
●	22%	Non-bio sectors
●	1%	Continuing study
●	7%	Unknown

Initial employment is often in entry-level positions consistent with the fact that, for most of our graduates, this is the first full-time job using their acquired science and business knowledge.

We have seen numerous Bioscience Enterprise graduates being promoted or given new roles over the course of the first two years. Several companies have employed more than one MBioEnt graduate indicating widespread satisfaction with the quality of our graduates.

56% of our graduates are employed in New Zealand, while 44% are employed overseas.

Internships and employment examples:

AFT Pharmaceuticals
 AgResearch
 Aroa Biosurgery
 AstraZeneca, Sydney
 ATEED
 AUT Enterprises
 Baldwins
 Baxter's Healthcare
 Bayer NZ
 Biomatters
 BioPacific Ventures
 CoDa Therapeutics
 Coloplast Ltd, Hongkong
 Cranleigh Merchant Bankers
 Cawthron
 Comvita
 Douglas Pharmaceuticals
 Ernst & Young, Mannheim
 Fertility Associates
 Fisher & Paykel Healthcare
 Health Innovation Hub
 Ingredient Solutions
 Johnson & Johnson, Sydney
 KODE Biotech
 Lanzatech
 MoRST
 Merck Serono, Sydney
 Neuren
 New Image
 NZBIO
 NZ Pharmaceuticals
 NZ Trade & Enterprise
 Pacific Channel
 Plant & Food Research
 Polybatics
 Roche
 Scion
 Syngenz
 Sygenta, Basel
 SynMedChem, Melbourne
 Scarlatti
 Sutton Group
 UniServices
 United BioSource, London
 Unlimited
 Vital Foods
 ViaLactia
 Watercare

Career opportunities

Biotechnology industry including pharmaceutical, core biotech companies, biomedical/device companies, agri-business, bio-processes companies, food and beverage industry, business-development firms, investment banking firms and investors such as venture capital firms, investment firms, Government agencies, tertiary education sector, technology transfer offices at universities and CRIs.

Typical position titles include the following:

Business analyst
Commercial analyst
Marketing executive
Clinical research associate
Project manager
Sales consultant
Regulatory affairs associate
Investment intern
Business development manager

"I've always had a passion for science, but with the global growth in the science and biotechnology industries I realised I had an enthusiastic eye for the 'business of science'.

"My masters thesis was on the global regulatory implications of a new extraction technology for a New Zealand nutraceutical company. My research helped to guide the company's international market entry strategy.

"I enjoyed learning about the theories and methodologies, as well as the commercial know-how that is involved in bringing a product from the laboratory and research development fields to market.

"Through this programme I was able to understand that the commercialisation and innovation of science isn't a linear process, but rather an intricate mix of elements.

"I am currently working in product and marketing support for ThermoFisher Scientific. My role focuses on providing effective support to enable the maximisation of portfolio growth. I am continually drawing on the knowledge gained from the MBioEnt programme. I would recommend the programme to anyone who wants to be part of the 'business of science' sector."

Hima Gollapalli completed her Master of Bioscience Enterprise in 2014.



Meet our graduates



Stephanie Marshall
MBioEnt 2010
Market Access Writer
Evidera, London



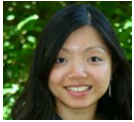
Charles Beasley
MBioEnt 2013
Clinical and Regulatory Associate
AFT Pharmaceuticals, Auckland



Hayden Paul
MBioEnt 2011
Brand Manager
Bayer (NZ), Auckland



Emma Armitage
MBioEnt 2014
Business Analyst
BioPacific Ventures, Auckland



Vina Komari
MBioEnt 2012
New Products Co-ordinator
Douglas Pharmaceuticals, Auckland



John Boikov
MBioEnt 2015
Business Development Manager
Revolution Fibres, Auckland

"BioPacific has been taking interns and employing graduates from the MBioEnt course for some years now. In fact they comprise the majority of our staff! We really rate the course as top quality, and the people that come through it are too. They are wonderfully bilingual, speaking both science and business, they are keen to contribute and work as a team, and they add tremendous value to our investment and commercialisation business."

– Dr Andrew Kelly, Executive Director, BioPacific Partners

"My main areas of interest at undergraduate level were exercise physiology, neurophysiology and biotechnology."

"The biotechnology scene is evolving disproportionately fast. In order to achieve my career goals and gain a broader view of the commercial world of science, I felt it was appropriate to do postgraduate study in Bioscience Enterprise."

"When I finish my studies I hope that it will lead me into a biotechnology firm, hopefully into a consultancy role."

"Throughout my time at the University of Auckland, I have taken part in many of the sports programmes that are offered, including the inter-faculty basketball competition, as well as social basketball leagues. I'm also a member of the University Sport and Recreation Centre, which allows me to stay healthy and active when I have time outside of my studies."

William Lin is studying for a Postgraduate Diploma in Bioscience Enterprise.



Helpful information

Academic dates

www.auckland.ac.nz/dates

Accommodation

www.accommodation.auckland.ac.nz

Apply for postgraduate study

www.auckland.ac.nz/applynow

Career Development and Employment Services

www.cdcs.auckland.ac.nz

Childcare

www.auckland.ac.nz/childcare

Course advice and degree planning in Science

www.science.auckland.ac.nz/student-centre

Disability Services

www.disability.auckland.ac.nz

How to enrol

www.auckland.ac.nz/enrolment

Information for postgraduate students

www.postgraduate.ac.nz

International students

www.international.auckland.ac.nz

Libraries and Learning Services

www.library.auckland.ac.nz

Māori and Pacific students

www.science.auckland.ac.nz/tuakana

Need help?

www.askauckland.ac.nz

Postgraduate Students' Association

www.pgsa.org.nz

Rainbow Science Network for LGBTI students

www.science.auckland.ac.nz/rainbowsience

Scholarships and awards

www.scholarships.auckland.ac.nz

www.auckland.ac.nz/fees

Support for students

www.science.auckland.ac.nz/support

APPLICATIONS CLOSE ON 1 DECEMBER

**Questions about
Bioscience Enterprise?**

director@bioscienterprise.ac.nz

Disclaimer

Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the University of Auckland Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies.



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Web: www.science.auckland.ac.nz/bioscience-enterprise



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www.facebook.com/science.uoa